

In the Claims:

1. (Currently amended) Method for optically monitoring a running fiber strand made of natural fibers, in which at least one light signal is transmitted onto the fiber strand and in which a light signal emitted by the fiber strand is received by a detector and is evaluated to determine a foreign substance made of synthetic material, characterized ~~characterised~~ in that an output region for the light signal is scanned by the detector, which is arranged outside an input region, in which the light signal impinges on the fiber strand, the light signal being transmitted from the input region to the output region by the light-guiding properties of the foreign substance made of synthetic material.
2. (Currently amended) Method according to claim 1, characterized ~~characterised~~ in that the light signal impinges on the fiber strand in the input region with a spacing of a few millimeters from the output region.
3. (Currently amended) Method according to claim 2, characterized ~~characterised~~ in that the light signal is projected as a very narrow band, lying transversely to the fiber strand, onto the surface of the fiber strand.
4. (Currently amended) Method according to ~~any one of claims 1 to 3~~, characterized ~~characterised~~ in that the light signal is generated by a laser, which projects a bundled light signal in the input region onto the fiber strand.
5. (Currently amended) Method according to ~~any one of claims 1 to 4~~, characterized ~~characterised~~ in that the light signal is received by a photocell, the luminous intensity of the signal being evaluated to determine the foreign substance.
6. (Currently amended) Method according to claim 5, characterized ~~characterised~~ in that

the measured luminous intensity is compared with a threshold value for evaluation, in that a fault signal is generated when the threshold value is exceeded and in that the fault signal triggers a process intervention.

7. (Currently amended) Method according to ~~any one of the preceding~~ claims 1, characterized ~~characterised~~ in that the size of the output region is determined by an optical system associated with the photocell.

8. (Currently amended) Device for optically monitoring a running fiber strand made of natural fibers, ~~carrying out the method according to any one of claims 1 to 7 with a light source (2), with a running fiber strand (1) made of natural fibers~~, illuminated by a ~~the~~ light source (2), with a detector (9) for receiving a light signal (7) emitted by the fiber strand (1) and with evaluation electronics (10) connected to the detector (9) for determining a foreign substance (5) made of synthetic material, characterized in that the light source (2) is directed onto an input region (4), in which the light signal (3) impinges on the fiber strand (1), in that the detector (9) is directed onto an output region (6) to receive the transmitted light signal (7), and in that the input region (4) and the output region (6) are separated from one another.

9. (Currently amended) Device according to claim 8, characterized ~~characterised~~ in that a spacing A is provided between the input region (4) of the light signal (3) and the output region (6) of the light signal (7).

10. (Currently amended) Device according to claim 8, characterized ~~characterised~~ in that the spacing is in the region of 0.5 mm to 5 mm.

11. (Currently amended) Device according to ~~any one of~~ claims 8 ~~to 10~~, characterized ~~characterised~~ in that the light source (2) is provided such that the light signal (3) can be projected as a very narrow band (14) lying transversely to the running direction of the fiber band (1).

12. (Currently amended) Device according to claim 11, characterized ~~characterised~~ in that the light source is configured as a laser (2).

13. (Currently amended) Device according to ~~any one of~~ claims 8 to 12, characterized ~~characterised~~ in that the detector (9) is formed by a photocell, by which the luminous intensity of the signal (7) is detected.

14. (Currently amended) Device according to claim 13, characterized ~~characterised~~ in that an optical system (8) is associated with the photocell (9) and in that the optical system (8) has at least one macrolens, by which the output region (7) is determined.

15. (Currently amended) Device according to ~~any one of~~ claims 8 to 15, characterized ~~characterised~~ in that the evaluation electronics (10) have a storage means (11) for receiving a threshold value for the luminous intensity and computer means (12) for determining a fault signal for identifying a foreign substance.